is still the chief cause of many of the shortcomings which those interested in public health work recognize.

While the new health officer has, according to the newspapers, denied that he expects to discharge any of the personnel at present in the department, he has also said that if the mayor wished to appoint any friends, he would try to coöperate.

We hope that nothing we have said will be considered personal. It is not intended to be so, but unquestionably a most deplorable situation has come about, and no one on the outside knows what to expect.

Chicago is one of our largest and most important cities, and what happens in health matters there deeply concerns the entire United States.

This JOURNAL is interested in building up public health as a profession, and every such occurrence sets back the good work which has been going on for a number of years.

THE BAD MILK IN OUR SMALL TOWNS

STARTLING and shocking are the facts revealed by a recent survey of market milk in the small towns of the United States. In our towns and cities having populations of less than 25,000 the milk seems as a general rule to be dirty and contaminated. According to a report of the American Child Health Association,[1] which has coöoperated in investigations in 19 states, the milk supplies of small towns are high in bacteria, seldom come from tuberculin tested cattle, and are rarely pasteurized.

In 117 small towns and cities studied, an average of 25 per cent of the milk supplies examined contained 200,000 or more bacteria per c.c., while an average of 40 per cent had 100,000 or more bacteria. Fifty-one cities gave a positive test for *B. Coli* in 50 per cent or more of the supplies tested and 21 cities gave such a positive test in 75 per cent or more. Physical standards used for showing dirt revealed that most of the milk was actually dirty. In only two places could 75 per cent of the supplies be classed as "clean" or even "fairly clean."

Not one of the 117 towns and cities had 90 per cent pasteurization, and 97 of these communities had no pasteurization at all. These facts are in direct contrast to the large cities of the country, as more than half of the cities with a population of 100,000 or greater now have 90 per cent or more of their milk supplies pasteurized.

These significant facts call for strenuous efforts on the part of sanitarians to assure a better and purer supply of the best of foods of man.

Campaigns to induce people to drink milk are valuable, because good milk is the one nearly perfect nutriment, but along with these cam-

paigns must go assiduous endeavors to secure clean and safe milk. There are apparently many parts of the country where it is wiser to use some concentrated form of milk, such as the dried product, than the extremely dangerous fluid milk supply. The milk furnished in our large cities, at least that supplied by the more reputable companies, may be drunk with impunity, but until more adequate and intensive methods have been taken to improve the milk supplies of small towns, their use as a beverage is evidently fraught with some hazards.

[1] Crumbine, S. J. and Holland, D. F. Survey of Small Town Milk Supplies, *Child Health Bulletin*, Nov., 1927.

SANITATION OF WATERWAYS

THE newly constituted Board of Public Health Engineers of the Ohio River Basin* is believed to be the first board of its kind in this country. Its creation points clearly to further improvement in the sanitation of our waterways.

Our methods of attacking the stream pollution problem are varied, to say the least. Some consider coöperation with industry as the solution; others maintain that the results of research will prove to be the explanation; while a third group adheres closely to strictly regulatory measures. It would seem that the combining of all three of these courses in such balance as to be applicable to the needs in each separate instance would be the best procedure.

From the administrative standpoint, authority for control has been lodged in some cases in a single regulatory body such as a state health department, and in others, in a new group like the Pennsylvania Sanitary Water Board having diversified interests. However, the general tendency appears to be toward the formation in states of such boards or committees as will include within themselves all the different interests concerned in the purity of the waters. The policies of these administrative bodies differ. Some set up rigid control to abate or, at least, diminish all pollution; some, under a plan of stream classification, propose that certain waterways should be devoted to the reception of wastes, while other streams should be maintained in their present state of purity.

The trend in waterways sanitation in this country resembles that in England which has had a hundred or more years of experience with this question. The chemist [1] of the West Riding Rivers Board has pointed out that in England there has been an improvement in the waterways of the older industrial areas due to remedial measures. On the other hand, he indicates that in the newer areas conditions are

* See page 104.